WHAT IS CLAIMED IS:

1   1.   A method for diagnosing a computer over a network, comprising:

2   providing a program to execute on the computer, wherein the program causes

3   the computer to perform:

4   (i) downloading at least one object from a server to the computer over

5   the network;

6   (ii) determining performance data with respect to downloading the

7   object from the server to the computer over the network to diagnose

8   performance problems with the computer; and

9   (iii) transmitting the determined performance data to a diagnostic

10   system over the network.

1   2.   The method of claim 1, wherein determining the performance data

2   comprises determining a network transmission time to download the object from the

3   server.

1   3.   The method of claim 2, wherein the diagnostic computer stores the

2   performance data as a record in a database.

1   4.   The method of claim 3, wherein the program displays the performance

2   data at the computer being diagnosed and average performance data determined from

3   the database to provide information to diagnose the computer.

1   5.   The method of claim 3, wherein the diagnostic program displays the

2   performance from the computer being diagnosed and average performance data

3   determined from the database at the server to provide information to diagnose the

4   computer.

1   6.   The method of claim 2, further comprising;

2   determining a network transmission time for a probe computer that is in a

3   proximate location with respect to the server to download the at least one object from

4   the server; and

5   using the network transmission time for the probe computer to determine a

6   server load delay time and a network-only delay time which indicates time to

7   download the at least one object from the server to the computer that does not include

8   the server load delay.

1   7.   The method of claim 1, wherein providing the program comprises

2   transmitting the program over the network to diagnose the computer.

1   8.   The method of claim 1, wherein the program causes the computer to

2   further perform;

3   detecting a presence of a condition occurring as a result of downloading the at

4   least one object from the server;

5   building an electronic message addressed to the diagnostic computer including

6   information on the detected condition;

7   transmitting the electronic message to the diagnostic computer over the

8   network.

1   9.   The method of claim 1, wherein the performance data includes trace

2   route data indicating the route packets comprising the object travel through the

3   network when transmitted from the server to the computer.

1   10.   The method of claim 1, wherein the diagnostic program comprises an

2   applet that executes within an Internet web browser program executing on the

3   computer.

1   11.   A computer system for diagnosing an end user computer over a

2 network, comprising:

3   means for providing a program to execute on the end user computer, wherein

4 the program causes the computer to perform:

5   (i) downloading at least one object from a server to the end user

6   computer over the network;

7   (ii) determining performance data with respect to downloading the

8   object from the server to the end user computer over the network to diagnose

9   performance problems with the end user computer; and

10   (iii) transmitting the determined performance data to the computer system

11 over the network.

12   means for receiving the performance data from the end-user computer; and

13   means for displaying the performance data.

1   12.   The system of claim 11, wherein determining the performance data

2 comprises determining a network transmission time to download the object from the

3 server.

1   13.   The system of claim 12, further comprising means for storing the

2 performance data as a record in a database.

1   14.   The system of claim 13, wherein the program displays the performance

2 data at the end user computer being diagnosed and average performance data

3 determined from the database to provide information to diagnose the end user

4 computer.

1   15.   The system of claim 13, further comprising means for displaying the

2 performance from the end-user computer being diagnosed and average performance

3 data determined from the database to provide information to diagnose the end user

4 computer.

1   16.   The system of claim 12, further comprising;

2   means for determining a network transmission time for a probe computer that

3 is in a proximate location with respect to the server to download the at least one

4 object from the server; and

5   means for using the network transmission time for the probe computer to

6 determine a server load delay time and a network-only delay time which indicates

7 time to download the at least one object from the server to the computer that does not

8 include the server load delay.

1   17.   The system of claim 11, wherein providing the program comprises

2 transmitting the program over the network to diagnose the end user computer.

1   18.   The system of claim 11, wherein the program causes the end-user

2 computer to further perform;

3   means for detecting a presence of a condition occurring as a result of

4 downloading the at least one object from the server;

5   means for building an electronic message addressed to the diagnostic

6 computer including information on the detected condition;

7   means for transmitting the electronic message to the diagnostic computer over

8 the network.

1   19.   The system of claim 11, wherein the performance data includes trace

2 route data indicating the route packets comprising the object travel through the

3 network when transmitted from the server to the end user computer.

1   20.   The system of claim 11, wherein the diagnostic program comprises an

2 applet that executes within an Internet web browser program executing on the end-

3 user computer.

4